

Scaled data based on original data using

LM-41-14 Approved Method for Photometric Testing Of Indoor Fluorescent Luminaires

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: HALO

Report Number: E395737

Luminaire Tested: **H7-417**

Issue Date: 3/3/2020

Test Information

Test Method: LM-41-14
Report Number: E395737
Test Lab:
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: HALO
Catalog Number: H7-417
Description: HALO RECESSED INC - H7 ADJ, BAFFLED EYEBALL, MAX TILT
Light Source: 75R30FL, 900 LUMENS
Ballast/Driver: -

Summary

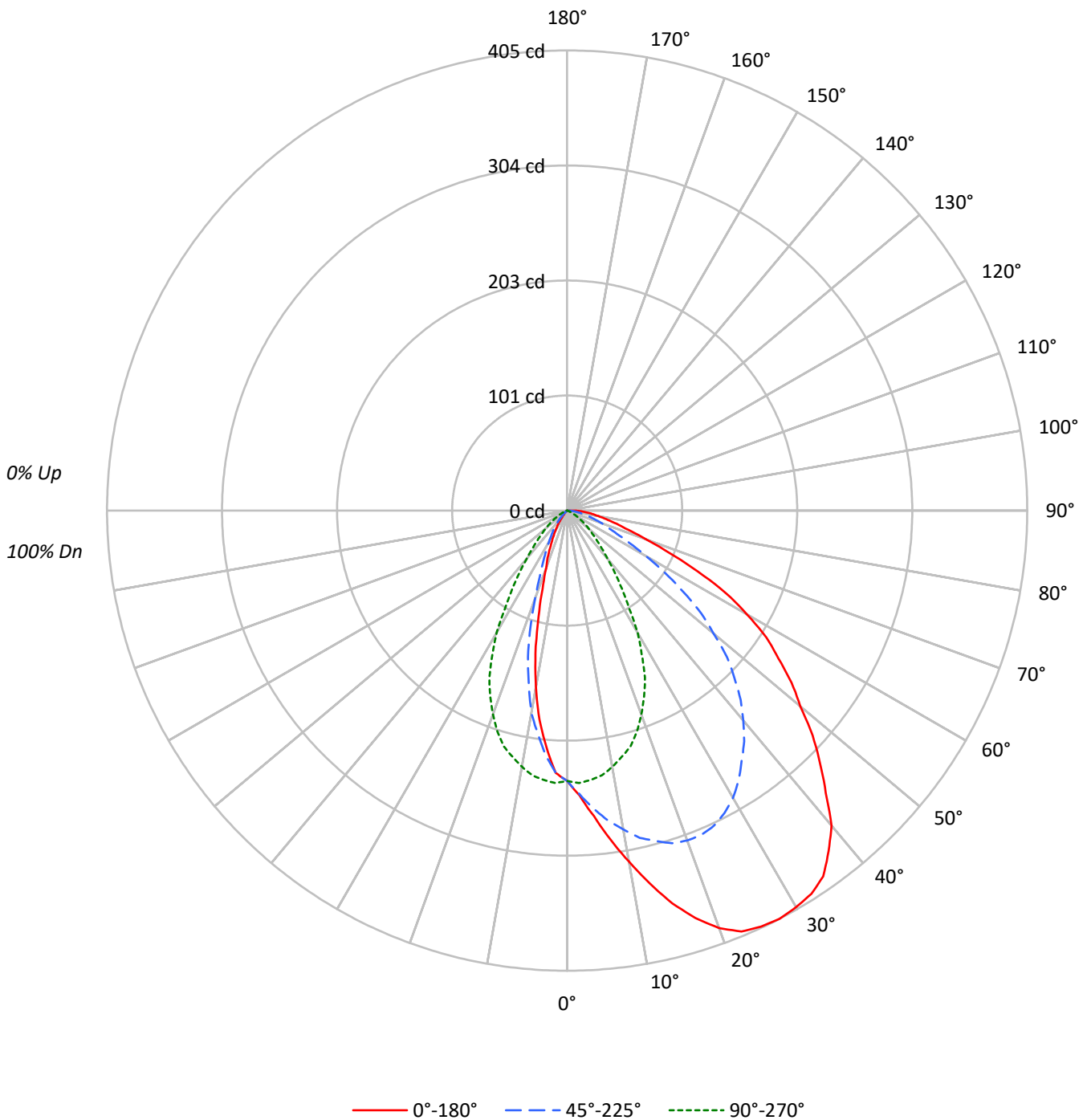
Lumens per Lamp: 900 (1 lamp)
Luminaire Lumens: 445.5 lumens
Efficiency: 49.5%
Efficacy: 5.9 lumens/watt
Spacing Criteria (0/90/45): 1.33 / 0.94 / 1.17
Luminous Opening: (L: 0 ' x W: -0.34 ' x H: 0 '
CIE Type: Direct

Input Watts (W): 75
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: E395737
CATALOG NUMBER: H7-417

Luminous Intensity Polar Plot





TEST NUMBER: E395737
 CATALOG NUMBER: H7-417

COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20				20				20				20				
RC	80				70				50				30				10				
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
RCR																					
0	59	59	59	59	58	58	58	58	55	55	55	53	53	53	51	51	51	49	49	49	49
1	55	53	51	49	53	52	50	49	50	48	47	48	47	46	46	45	44	43	43	43	43
2	51	47	44	42	49	46	44	41	45	42	40	43	41	40	42	40	39	38	38	38	38
3	47	42	39	36	46	42	38	36	40	37	35	39	36	35	38	36	34	33	33	33	33
4	43	38	34	31	42	37	34	31	36	33	31	35	33	30	34	32	30	29	29	29	29
5	40	35	31	28	39	34	30	27	33	30	27	32	29	27	31	29	27	26	26	26	26
6	37	31	27	25	36	31	27	24	30	27	24	29	26	24	29	26	24	23	23	23	23
7	35	29	25	22	34	28	25	22	28	24	22	27	24	22	26	24	22	21	21	21	21
8	33	26	23	20	32	26	22	20	26	22	20	25	22	20	24	22	20	19	19	19	19
9	31	24	21	18	30	24	21	18	24	20	18	23	20	18	23	20	18	17	17	17	17
10	29	23	19	17	28	22	19	17	22	19	17	22	19	17	21	18	16	16	16	16	16

AVERAGE LUMINANCE (cd/sqm):

	0°	90°	180°
0°	Luminous shape not found,		
5°	reference photometric report, or contact		
10°	the photometric lab for calculations.		
15°			
20°			
25°			
30°			
35°			
40°			
45°			
50°			
55°			
60°			
65°			
70°			
75°			
80°			
85°			



TEST NUMBER: E395737
 CATALOG NUMBER: H7-417

ZONAL LUMENS:

Zone	Lumens	% Fixture	% Lamp
0°-10°	22.7	5.1	2.5
10°-20°	61.6	13.8	6.8
20°-30°	85.3	19.2	9.5
30°-40°	91.4	20.5	10.2
40°-50°	79.2	17.8	8.8
50°-60°	58.0	13.0	6.4
60°-70°	31.2	7.0	3.5
70°-80°	12.0	2.7	1.3
80°-90°	4.1	0.9	0.5
90°-100°	0.0	0.0	0.0
100°-110°	0.0	0.0	0.0
110°-120°	0.0	0.0	0.0
120°-130°	0.0	0.0	0.0
130°-140°	0.0	0.0	0.0
140°-150°	0.0	0.0	0.0
150°-160°	0.0	0.0	0.0
160°-170°	0.0	0.0	0.0
170°-180°	0.0	0.0	0.0
0°-30°	169.6	38.1	18.8
0°-40°	261.1	58.6	29.0
0°-60°	398.2	89.4	44.2
0°-90°	445.5	100.0	49.5
90°-120°	0.0	0.0	0.0
90°-150°	0.0	0.0	0.0
90°-180°	0.0	0.0	0.0
0°-180°	445.5	100.0	49.5

CANDELA DISTRIBUTION:

	0°	45°	90°	135°	180°	Flux
0°	238	238	238	238	238	
5°	270	263	238	216	209	27
15°	358	301	215	133	97	102
25°	404	306	162	50	34	186
35°	393	268	84	21	11	243
45°	315	208	37	5	2	243
55°	227	125	16	1	1	203
65°	127	48	4	0	0	126
75°	45	20	1	0	0	49
85°	17	5	0	0	0	19
90°	7	2	0	0	0	



TEST NUMBER: E395737
 CATALOG NUMBER: H7-417

CANDELA DISTRIBUTION (FULL):

	0°	2.5°	5°	7.5°	10°	12.5°	15°	20°	22.5°	25°	30°
0°	238	238	238	238	238	238	238	238	238	238	238
2.5°	251	252	252	253	253	254	253	253	251	252	253
5°	270	274	272	273	272	271	272	271	269	271	269
7.5°	292	294	294	292	293	293	292	290	288	286	285
10°	314	314	315	314	312	313	313	310	306	304	301
12.5°	336	339	338	336	334	334	333	330	327	322	316
15°	358	358	357	356	355	355	352	346	342	339	332
17.5°	376	377	376	375	375	372	369	362	357	354	344
20°	391	393	392	390	388	386	383	375	369	364	352
22.5°	401	402	402	401	399	395	393	383	377	372	358
25°	404	407	406	405	403	401	398	387	381	375	360
27.5°	405	406	406	405	403	402	398	387	382	374	358
30°	403	405	404	403	401	399	396	384	377	370	352
32.5°	400	401	400	399	397	394	389	375	369	361	343
35°	393	394	393	392	388	384	378	363	357	348	330
37.5°	378	380	378	377	373	368	363	349	341	331	314
40°	362	362	359	359	354	350	344	330	322	314	297
42.5°	337	341	339	338	333	329	323	309	301	295	278
45°	315	317	314	311	310	305	298	288	279	274	259
47.5°	293	293	292	290	285	283	279	267	262	255	242
50°	268	270	270	268	264	260	259	249	242	237	223
52.5°	249	248	247	247	243	242	238	229	225	218	205
55°	227	229	228	226	225	221	218	211	204	198	184
57.5°	208	209	210	205	204	203	199	188	182	179	163
60°	183	186	184	184	181	179	176	165	159	156	138
62.5°	158	159	157	158	154	153	150	139	134	126	112
65°	127	126	129	126	125	123	120	111	106	100	85
67.5°	97	97	97	95	98	92	92	84	80	74	65
70°	74	74	74	72	72	71	68	63	60	56	50
72.5°	56	56	56	56	54	53	51	48	46	44	39
75°	45	44	44	44	43	42	41	39	37	35	31
77.5°	35	36	36	35	34	33	33	31	29	28	25
80°	28	28	28	27	27	27	26	24	23	22	20
82.5°	22	23	22	22	22	21	20	19	18	17	15
85°	17	17	17	17	16	16	15	13	13	12	11
87.5°	12	12	12	12	11	11	11	9	9	8	7
90°	7	7	8	7	7	7	7	6	5	5	4



TEST NUMBER: E395737
 CATALOG NUMBER: H7-417

CANDELA DISTRIBUTION (continued):

	35°	40°	45°	67.5°	90°	112.5°	135°	157.5°	180°
0°	238	238	238	238	238	238	238	238	238
2.5°	251	250	250	247	240	236	231	230	231
5°	266	264	263	253	238	227	216	210	209
7.5°	281	278	275	257	235	216	198	189	186
10°	296	290	285	258	229	204	181	164	158
12.5°	310	301	295	259	222	189	156	135	129
15°	322	311	301	257	215	171	133	105	97
17.5°	331	319	307	254	204	151	107	79	72
20°	338	323	309	249	191	131	82	61	54
22.5°	341	324	309	243	177	108	63	48	45
25°	342	323	306	234	162	89	50	38	34
27.5°	339	319	300	224	142	70	40	30	27
30°	332	311	292	212	124	56	32	24	21
32.5°	321	301	281	200	101	45	26	18	16
35°	308	289	268	182	84	36	21	14	11
37.5°	293	274	256	166	69	30	16	9	7
40°	278	259	241	146	55	25	12	6	4
42.5°	261	241	226	125	45	20	8	3	2
45°	243	226	208	104	37	15	5	2	2
47.5°	225	209	191	86	30	11	3	1	1
50°	207	190	168	69	25	8	2	1	1
52.5°	188	170	149	56	20	5	1	1	1
55°	168	147	125	44	16	3	1	1	1
57.5°	144	123	102	37	12	2	1	0	0
60°	119	99	80	30	9	1	1	0	0
62.5°	94	77	62	24	6	1	0	0	0
65°	72	59	48	20	4	1	0	0	0
67.5°	56	47	38	16	3	1	0	0	0
70°	43	37	32	12	2	1	0	0	0
72.5°	35	30	25	8	1	0	0	0	0
75°	28	24	20	6	1	0	0	0	0
77.5°	22	19	15	4	1	0	0	0	0
80°	17	14	11	2	1	0	0	0	0
82.5°	12	10	8	1	0	0	0	0	0
85°	9	7	5	1	0	0	0	0	0
87.5°	6	4	3	1	0	0	0	0	0
90°	3	3	2	1	0	0	0	0	0

(END OF REPORT)